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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/582,900

06/13/2006

Arnaud Bailleul

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EXAMINER

HUQ, AHMED E

ART UNIT

PAPER NUMBER

4182

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/582,900	Applicant(s) BAILLEUL, ARNAUD	
	Examiner AHMED E. HUQ	Art Unit 4182	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 June 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/13/2006, 7/26/2007</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office Action is responsive to patent application number 10/582900 filed on 12/09/2004 and it has foreign priority date 12/16/2003. Claims 1-10 were considered.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: Figure. 2. In addition, FIG. 1-4 needs labeling for clear understanding of the drawing which must be supported in Specification. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 1, 2 are rejected under 35 U.S.C 102(e) as being anticipated by
MacKinnon ("Designing UML Diagrams for Technical Documentation")

Claim 1, MacKinnon teaches during the modeling, a graphics interface is used when creating an element of a model (page 105, the presentation of UML diagram in the first paragraph of the abstract), placing a requirement immediately on the element in this graphics interface (page 108) and the element is systematically filled in with the upward requirement which has given rise to the creation of this element (Figure 1 and 2, Page 108, see Summary (3.1.1)).

Claim 2, MacKinnon teaches all the limitation of claim 1. MacKinnon also teaches when creating a UML Requirement which has repercussions on several elements of the model (figure 2 where diagram containing different elements), attaching said requirement to the common element containing the set of elements on which the requirement has repercussions (Figure 3 where each class diagram is created from another class or sub-class).

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 3,4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mackinnon ("Designing UML Diagrams for Technical Documentation) in view of Gangopadhyay (US 6,986,145 B2).

Consider claim 3, Mackinnon discloses all the elements of claim 1.

Gangopadhyay further teaches when an element of the model is deleted, all the UML Requirements attached to this element are likewise deleted (Col. 10 lines 17-37 Fig. 6). It would have been obvious to one of ordinary skills in the art at the time the invention to also delete the relational model (such as: 1-to-many or 1-to-1 relations) requirements attached to this element when an element of any model is deleted. The motivation is to edit elements in one location and it will take same affect in rest of the linked element areas; moreover, it will be easier to trace any faulty data entry within program.

Consider claim 4, Neil Mackinnon discloses all the elements of claim 3, in view of Gangopadhyay. Gangopadhyay further teaches wherein all the UML Requirements attached to all the elements attached to said element are likewise deleted (Col. 10 lines 17-44, Fig. 6). It would have been obvious to one of ordinary skills in the art at the time the invention to also delete the relational model (such as: 1-to-many or 1-to-1 relations) requirements attached to this element when an element of any model is deleted. The motivation is to edit elements in one location and it will take same affect in rest of the linked element areas; moreover, it will be easier to trace any faulty data entry within program.

Claim 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over MacKinon ("Designing UML Diagrams for Technical Documentation) in view of Richard Stevens (UK 2,353,613).

Consider claim 5, Neil Mackinnon discloses all the elements of claim 1. Richard Stevens further teaches the UML Requirements are exported to the "DOORS" requirements management tool so as to ensure therein their management and their traceability (page 3 lines 6-24). It would have been obvious to one of ordinary skills in the art at the time the invention to export the UML requirements to the DOORS. The motivation is to trace links between elements in one location and any other location where element is connected and it will be easier to trace any faulty data.

Consider claim 6, Neil Mackinnon discloses all the elements of claim 5, in view of Richard Stevens. Richard Stevens further teaches the UML Requirements are exported to DOORS, in the course of the development of the model, each time that this model has attained a stable state (page 3 lines 25-27, page 4 lines 1-4 where a separate module stores a separate set of requirements). It would have been obvious to one of ordinary skills in the art at the time the invention to export the UML requirements to the DOORS, the model reach a stable condition. The motivation is to eliminate any faulty connection or link within the DOORS software package.

Consider claim 7, Neil Mackinnon discloses all the elements of claim 2. Richard Stevens further teaches when an element of the model is deleted, all the UML Requirements attached to this element are likewise deleted (page 4 lines 5-12). It would have been obvious to one of ordinary skills in the art at the time the invention to also

delete the relational model (such as: 1-to-many or 1-to-1 relations) requirements attached to this element when an element of any model is deleted. The motivation is to edit elements in one location and it will take same affect in rest of the linked element areas; moreover, it will be easier to trace any faulty data entry within program.

Consider claim 8, Neil Mackinnon discloses all the elements of claim 2. Richard stevens further teaches the UML Requirements are exported to the DOORS requirements management tool so as to ensure therein their management and their traceability (page 3 lines 5-24). It would have been obvious to one of ordinary skills in the art at the time the invention to export the UML requirements to the DOORS. The motivation is to trace links between elements in one location and any other location where element is connected and it will be easier to trace any faulty data.

Claim 9, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over I MacKinnon ("Designing UML Diagrams for Technical Documentation) in view of Gangopadhyay (US 6,986,145 B2), further view of Richard stevens (UK 2,353,613).

Consider claim 9, Neil Mackinnon and Gangopadhyay discloses all the elements of claim 3, in view of Richard stevens. Richard stevens further teaches UML Requirements are exported to the DOORS requirements management tool so as to ensure therein their management and their traceability (page 3 lines 5-24, page 4 lines 14-20). It would have been obvious to one of ordinary skills in the art at the time the invention to export the UML requirements to the DOORS. The motivation is to trace links between elements in one location and any other location where element is connected and it will be easier to trace any faulty data.

Consider claim 10, Neil Mackinnon and Gangopadhyay discloses all the elements of claim 4. Richard stevens further teaches the UML Requirements are exported to the DOORS requirements management tool so as to ensure therein their management and their traceability (page 2 lines 20-24, page 3 lines 6-24). It would have been obvious to one of ordinary skills in the art at the time the invention to export the UML requirements to the DOORS. The motivation is to trace links between elements in one location and any other location where element is connected and it will be easier to trace any faulty data.

Conclusion

Iyengar et al. (US 6,038,393) teaches software developmental tools to accept UML object model and able to store in OMG compliant UML representation.

Colin Atkinson and Thomas Kuhne (Re architecting the UML Infrastructure) teaches UML mappings in general modeling framework.

Cris Kobryn, (Visual Requirements- Driven Development with UML 2.0) teaches solutions to why projects fail and solutions how to prevent failure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AHMED E. HUQ whose telephone number is (571)270-1515. The examiner can normally be reached on Monday-Friday 8:30-6:00; Alternate Friday OFF.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nguyen Thu can be reached on 571-272-6967. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ahmed E Huq/
Examiner, Art Unit 4182
3/11/2008

/Thu Nguyen/
Supervisory Patent Examiner, Art Unit 4182